

WHAT IS CLAIMED IS:

1. A display device comprising:

 - a conductive barrier film; and
 - a wiring containing Cu as its main component over the conductive barrier film,

wherein a top surface of the conductive barrier film is not aligned with that of the wiring containing Cu as its main component.
2. A display device comprising:

 - a conductive barrier film; and
 - a wiring containing Cu as its main component over the conductive barrier film,

wherein a top surface of the conductive barrier film is not aligned with that of the wiring containing Cu as its main component, and

wherein an insulating barrier film is covered with the top surface and a side surface of the wiring containing Cu as its main component.
3. A display device comprising:

 - a conductive film;
 - a conductive barrier film; and
 - a wiring containing Cu as its main component over the conductive barrier film,

wherein a width of the conductive film is aligned with that of the conductive barrier film, and

wherein a width of the wiring containing Cu as its main component is narrower than that of the conductive barrier film.
4. A display device comprising at least a signal line and a scan line provided to intersect with the signal line:

wherein the signal line comprises a conductive film, a conductive barrier film, and a wiring containing Cu as its main component over the conductive barrier film, and

wherein a width of the conductive film is aligned with that of the conductive barrier film, and a width of the wiring containing Cu as its main component is narrower than that of the conductive barrier film.

5. A display device comprising at least a signal line and a scan line provided to intersect with the signal line:

wherein the scan line comprises a conductive barrier film and a wiring containing Cu as its main component over the conductive barrier film, and

wherein a width of the wiring containing Cu as its main component is narrower than that of the conductive barrier film.

6. A display device comprising at least a signal line and a scan line provided to intersect with the signal line:

wherein the signal line comprises a conductive film, a first conductive barrier film, and a first wiring containing Cu as its main component over the first conductive barrier film,

wherein the scan line comprises a second conductive barrier film and a second wiring containing Cu as its main component over the second conductive barrier film,

wherein a width of the conductive film is aligned with that of the first conductive barrier film, and a width of the first wiring containing Cu as its main component is narrower than that of the first conductive barrier film, and

wherein a width of the second wiring containing Cu as its main component is narrower than that of the second conductive barrier film.

7. A display device according to claim 4 further comprises a light emitting element, wherein driving current is supplied to the light emitting element through the

signal line.

8. A display device according to claim 5 further comprises a light emitting element, wherein voltage is input to the light emitting element through the signal line.

9. A display device according to claim 6 further comprises a light emitting element, wherein voltage is input to the light emitting element through the signal line.

10. A display device according to claim 6 further comprises a light emitting element and a TFT electrically connected to the light emitting element, wherein a gate electrode of the TFT also comprises the second conductive barrier film and the second wiring containing Cu as its main component over the second conductive barrier film.

11. A display device according to claim 6 further comprises a light emitting element and a TFT electrically connected to the light emitting element, wherein source and drain electrodes of the TFT also comprises the conductive film, the first conductive barrier film, and the first wiring containing Cu as its main component over the first conductive barrier film.

12. A display device comprising a semiconductor film on an insulating surface and a gate electrode over the semiconductor film,

wherein the gate electrode comprises a conductive barrier film and a wiring containing Cu as its main component over the conductive barrier film,

wherein a width of the wiring containing Cu as its main component is narrower than that of the conductive barrier film.

13. A display device comprising an impurity region provided in a semiconductor film on an insulating surface and an electrode connected to the impurity region,

wherein the electrode comprises a conductive film, a conductive

barrier film, and a wiring containing Cu as its main component over the conductive barrier film,

wherein a width of the conductive film is aligned with that of the conductive film, and

wherein a width of the wiring containing Cu as its main component is narrower than that of the conductive barrier film.

14. A display device comprising at least a wiring comprising:

a conductive film;

a conductive barrier film; and

a film containing Cu as its main component over the conductive barrier film; and

an input terminal electrically connected to the wiring,

wherein a width of the conductive film is aligned with that of the conductive barrier film,

wherein a width of the film containing Cu as its main component is narrower than that of the conductive barrier film, and

wherein the input terminal is not overlapped with the film containing Cu as its main component.

15. A display device according to claim 14, wherein the input terminal is connected to the wiring through resin comprising a conductor.

16. A display device according to claim 14, wherein an edge of the input terminal is not aligned with that of the film containing Cu as its main component.

17. A display device according to claim 14, wherein the wiring is connected to a protective circuit including a semiconductor film.

18. A display device according to claim 17 further comprising a scan line,

wherein the scan line is also connected to the protective circuit.

19. A display device according to claim 1, wherein the conductive barrier film comprises at least one of TiN, TaN, TiC, TaC, and WN.

20. A display device according to claim 2, wherein the conductive barrier film comprises at least one of TiN, TaN, TiC, TaC, and WN.

21. A display device according to claim 3, wherein the conductive barrier film comprises at least one of TiN, TaN, TiC, TaC, and WN.

22. A display device according to claim 4, wherein the conductive barrier film comprises at least one of TiN, TaN, TiC, TaC, and WN.

23. A display device according to claim 5, wherein the conductive barrier film comprises at least one of TiN, TaN, TiC, TaC, and WN.

24. A display device according to claim 6, wherein each of the first and second conductive barrier films comprises at least one of TiN, TaN, TiC, TaC, and WN.

25. A display device according to claim 12, wherein the conductive barrier film comprises at least one of TiN, TaN, TiC, TaC, and WN.

26. A display device according to claim 13, wherein the conductive barrier film comprises at least one of TiN, TaN, TiC, TaC, and WN.

27. A display device according to claim 14, wherein the conductive barrier film comprises at least one of TiN, TaN, TiC, TaC, and WN.

28. A display device according to claim 3, wherein the conductive film

comprises Ti.

29. A display device according to claim 4, wherein the conductive film comprises Ti.

30. A display device according to claim 6, wherein the conductive film comprises Ti.

31. A display device according to claim 13, wherein the conductive film comprises Ti.

32. A display device according to claim 14, wherein the conductive film comprises Ti.

33. A display device according to claim 1, wherein the wiring containing Cu as its main component is covered with an insulating barrier film, and the insulating barrier film comprises at least one of silicon nitride, silicon oxynitride, and aluminum nitride.

34. A display device according to claim 2, wherein the insulating barrier film comprises at least one of silicon nitride, silicon oxynitride, and aluminum nitride.

35. A display device according to claim 3, wherein the wiring containing Cu as its main component is covered with an insulating barrier film, and the insulating barrier film comprises at least one of silicon nitride, silicon oxynitride, and aluminum nitride.

36. A display device according to claim 4, wherein the wiring containing Cu as its main component is covered with an insulating barrier film, and the insulating barrier film comprises at least one of silicon nitride, silicon oxynitride, and aluminum

nitride.

37. A display device according to claim 5, wherein the wiring containing Cu as its main component is covered with an insulating barrier film, and the insulating barrier film comprises at least one of silicon nitride, silicon oxynitride, and aluminum nitride.

38. A display device according to claim 6, wherein each of the first and second wiring is covered with an insulating barrier film, and the insulating barrier film comprises at least one of silicon nitride, silicon oxynitride, and aluminum nitride.

39. A display device according to claim 12, wherein the wiring containing Cu as its main component is covered with an insulating barrier film, and the insulating barrier film comprises at least one of silicon nitride, silicon oxynitride, and aluminum nitride.

40. A display device according to claim 13, wherein the wiring containing Cu as its main component is covered with an insulating barrier film, and the insulating barrier film comprises at least one of silicon nitride, silicon oxynitride, and aluminum nitride.

41. A display device according to claim 14, wherein the film containing Cu as its main component is covered with an insulating barrier film, and the insulating barrier film comprises at least one of silicon nitride, silicon oxynitride, and aluminum nitride.

42. A method of manufacturing display device comprising the steps of:
forming a conductive barrier film over a substrate in a first deposition chamber;
transferring the substrate into a second deposition chamber without

exposing the air;

forming a wiring containing Cu as its main component over the conductive barrier film in the second deposition chamber;

transferring the substrate into a third deposition chamber without exposing the air; and

forming an insulating barrier film over the wiring containing Cu as its main component.

43. A method according to claim 42, wherein a holding means comprising a magnet keeps the substrate and a mask in the second deposition chamber, and sputtering is performed with the mask to form the wiring containing Cu as its main component.

44. A display device according to claim 43, wherein the mask has an auxiliary wiring fixed not to face the substrate.

45. A method of manufacturing display device comprising the steps of:

forming a semiconductor film over a substrate;

forming a gate electrode over the semiconductor film;

forming an impurity region in the semiconductor film with the gate electrode as a mask;

forming an insulating film to cover the gate electrode;

forming a contact in the insulating film;

forming a conductive barrier film in a first deposition chamber;

transferring the substrate into a second deposition chamber without exposing the air;

forming a wiring containing Cu as its main component over the conductive barrier film in the second deposition chamber;

transferring the substrate into a third deposition chamber without exposing the air; and

forming an insulating barrier film over the wiring containing Cu as its

main component,

wherein an electrode connected to the impurity region comprises at least the conductive barrier film and the wiring containing Cu as its main component.

46. A method according to claim 42, wherein the second deposition chamber comprises at least a target, a means for cooling the target, a means for moving the target up and down, and a magnet that moves parallel to a surface of the target.

47. A method according to claim 45, wherein the second deposition chamber comprises at least a target, a means for cooling the target, a means for moving the target up and down, and a magnet that moves parallel to a surface of the target.

48. A method according to claim 42, wherein reduced pressure is kept in the first to third deposition chamber.

49. A method according to claim 45, wherein reduced pressure is kept in the first to third deposition chamber.